Chapter 1. Project Summary

Why are access improvements to the Bremerton Transportation Center (BTC) needed?

State Route (SR) 304 is a designated State Route that connects SR 3 to the Bremerton Transportation Center (BTC) in downtown Bremerton. The SR 304 alignment in the downtown area is a one-way couplet from Burwell Street, south on Pacific Avenue, east on 1st Street, and north on Washington Avenue. See **Exhibit 1-1**. This couplet serves ingress and egress ferry traffic to and from the BTC, which is a major multimodal connection linking transit, pedestrian and vehicle access between Bremerton and Seattle via ferry.

Project Purpose

The purpose of this project is to provide efficient and functional transportation routes to improve access to and from the Bremerton Transportation Center (BTC), alleviate congestion, and provide safe, pedestrian-friendly access to Bremerton's downtown area. Specific elements to satisfy the project purpose include:

- Improve transportation circulation and safety in downtown Bremerton, as outlined in the Transportation Element of the City of Bremerton's Comprehensive Plan.
- Improve pedestrian, bicycle, and vehicular mobility and safety within the City of Bremerton's downtown core area.
- Provide uninterrupted access to local businesses, residences, and recreational areas in the downtown core.
- Separate regional trips from local trips.
- Enhance ferry, transit, and naval traffic regional movements by providing a direct access route on SR 304 between the Washington State Ferry Terminal (BTC) and Naval Avenue.
- Enhance BTC operations.

The SR 304 one-way couplet currently encircles Bremerton's core, with ingress traffic following Burwell Street, Pacific Avenue and 1st Street, and egress traffic following Washington Avenue to Burwell Street, 6th Street, or 11th Street. This encircling ingress and egress path has an impact on Bremerton's downtown area, as numerous locations exist with unnecessary pedestrian/vehicular interface that creates congestion, compromises safety and detracts from an enjoyable experience in the urban core. The situation is especially pronounced when the vehicle ferry to Seattle, passenger-only ferry to Seattle, and passenger-only ferry to Port Orchard are loading and unloading.

The Washington State Department of Transportation and its partners (Federal Highway Administration, Federal Transit Administration, Kitsap Transit, City of Bremerton, Washington State Ferries, and Puget Sound Navel Shipyard) have recognized safety and functional deficiencies in this traffic pattern, and have determined the need to remove Washington Avenue as the primary egress route of ferry traffic from the BTC. In their December 2004 Comprehensive Plan, the City of Bremerton identified the downtown core as deficient with regards to vehicle congestion, pedestrian safety, and ingress/egress to the BTC. As downtown Bremerton experiences major revitalization, an increase in pedestrian and vehicle traffic is expected, further worsening the existing deficiencies. The increased traffic volumes, along with the encircling effect caused by the SR 304 ingress and egress of ferry traffic directly conflicts with movement of people, bicycles and vehicles in the downtown area.

The Downtown Bremerton Pedestrian/BTC Access Improvements Project is proposed to address these deficiencies by directing ferry traffic to the periphery of downtown Bremerton rather than through the downtown core. Eliminating this bisection of the downtown area will create a safe, pedestrian friendly environment for current and future users. Most importantly, it would allow easier access to downtown businesses, residences, recreational parks, and waterfront

space for local pedestrians, bicyclists, traffic and transit. This project has been included in both the 2004 Washington State Transportation Improvements Plan (STIP) and in the Transportation Element of the City of Bremerton's Comprehensive Plan, indicating that the improvements proposed with the Downtown Bremerton Pedestrian/BTC Access Improvements Project are a priority at both the state and local level. See **Appendix I** for excerpts of the City's Comprehensive Plan.

In addition to addressing traffic patterns on SR 304 in downtown Bremerton, the Downtown Bremerton Pedestrian/BTC Access Improvements Project would construct needed improvements to the BTC. In 1997 and 2001 a Finding of No Significant Impact (FONSI) was issued by the Federal Transit Administration (FTA) after an Environmental Assessment was prepared for BTC improvements. Some of these improvements, including construction of a new passenger-only ferry facility, a new intermodal terminal and transit deck, terminal ticketing/waiting area, improved vehicle ferry waiting area, a Kitsap Transit vehicle parking structure, and bicycle storage lockers, have been constructed. Other improvements covered by the 2001 FONSI, referred to as "Phase C" improvements, have not yet been constructed. Kitsap Transit, the City of Bremerton and Washington State Ferries agreed to include Phase C, with minor modifications, in the Downtown Bremerton Pedestrian/BTC Access Improvements Project. The BTC improvements that will be built as part of this project include expansion of the ferry vehicle holding area to approximately 200 cars, relocation and reconstruction of three tollbooths, and construction of an approximately 1,000 to 1,200 square foot ferry administration building. See **Appendix D** for the 1997 and 2001 FTA FONSI's.

What agencies and funds are involved in the project?

In April 2003 the City received $28.8 million of Congressionally-earmarked federal funding through the Federal Highway Administration (FHWA) for environmental and preliminary engineering work on the project, which would provide enhanced transportation access throughout downtown Bremerton and to the BTC. FTA has set aside approximately $5.1 million, of which $0.92 million has been spent in pre-award authority, to construct the improvements to the BTC approved in 2001, including an expansion of the holding area to approximately 200 cars, relocation and reconstruction of three tollbooths, and construction of a ferry administration building. The remaining $4.2 million has been set aside through Kitsap Transit for the project. Total project funding of approximately $33.0 million is now anticipated for construction of improvements to the BTC ($4.2 million) and the access improvements to downtown Bremerton and the BTC ($28.8 million).

Who is leading the project?

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) are federal co-lead agencies on the project, while the Washington State Department of Transportation (WSDOT) and Kitsap Transit represent local co-lead agencies. Other cooperating agencies include the City of Bremerton, Washington State Ferries, and the Puget Sound Naval Shipyard (PSNS).

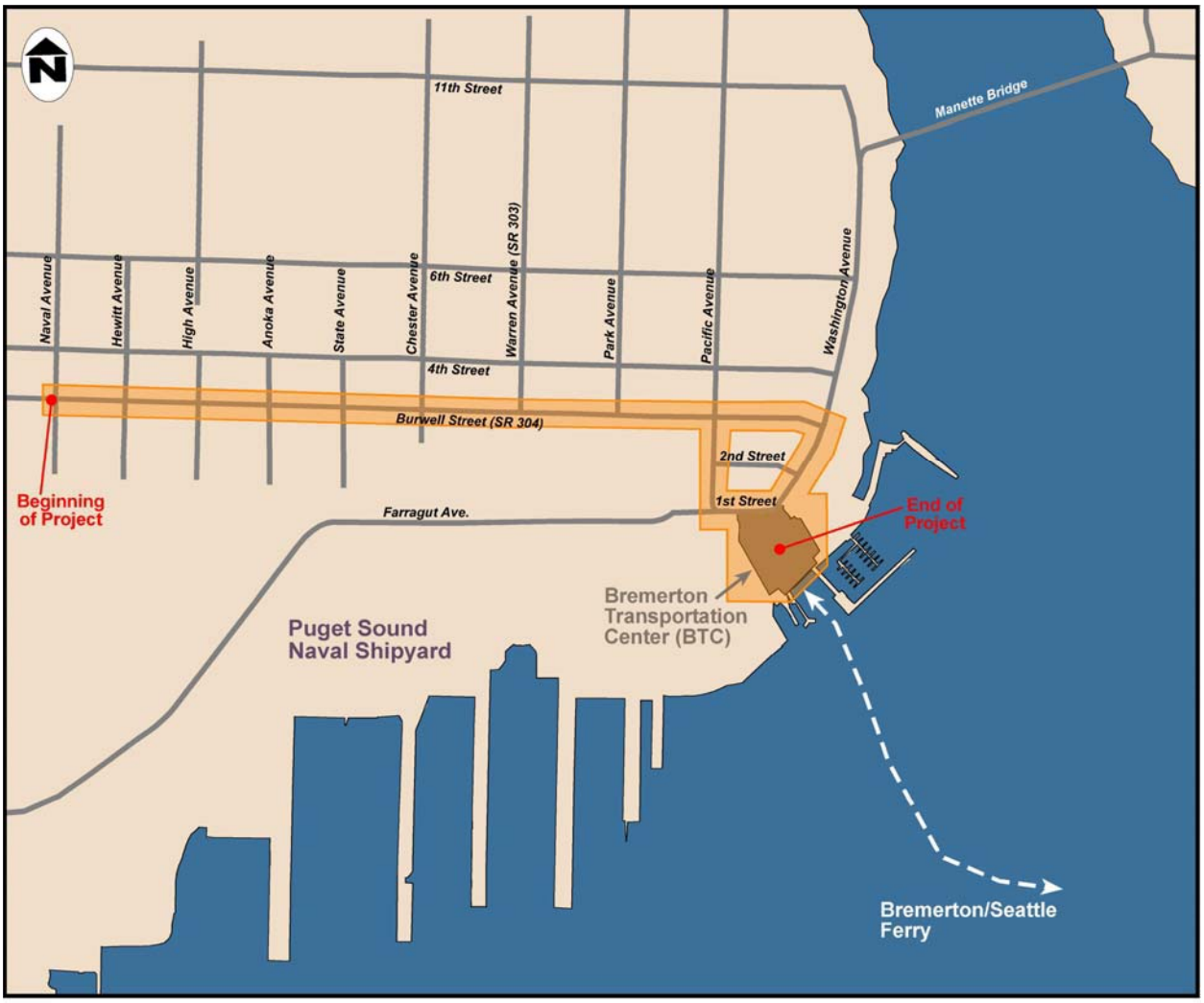

Exhibit 1-1. Project Location Map

Where is the Downtown Bremerton Pedestrian/BTC Access Improvements Project located?

The Downtown Bremerton Pedestrian/BTC Access Improvements Project is located in downtown Bremerton, Kitsap County, Washington. The project limits are from the Bremerton Ferry Terminal to the intersection of Burwell Street and Naval Avenue. These project limits are broken into two sections. **Exhibit 1-1** presents the general study area for the project.

Burwell Street between Naval Avenue and Warren Avenue

A traffic analysis was conducted on Burwell Street between the intersections of Naval Avenue and Warren Avenue to evaluate potential traffic operations that might result from the proposed traffic improvements to and from the BTC.

Burwell Street and Warren Avenue to the BTC

Access improvements to and from the BTC would be constructed via either surface street improvements or the combination of surface street improvements with an underground tunnel.

What are the project termini and why are they logical?

The project termini are Naval Avenue on the west and the Bremerton Transportation Center (BTC) to the east, near the intersections of 1st Street, Pacific Avenue and Washington Avenue. These locations were selected for the project termini because they are major traffic contributors in the project area.

Naval Avenue is the western terminus. Burwell Street (SR 304), west of Naval Avenue, is a four lane principal highway. Burwell Street narrows to three lanes east of Naval Avenue to the BTC. Naval Avenue is a major north-south traffic collector that distributes traffic to and from the Puget Sound Naval Shipyard gate and is a major transportation hub for Navy workers entering and exiting Naval grounds. Naval Avenue is also a major connector and collector/distributor roadway for east-west routes including Burwell Street, 6th Street, 11th Street, and other points north.

The Bremerton Transportation Center is the eastern terminus and Port of Entry to the City of Bremerton and Kitsap Peninsula from Seattle and areas east of Puget Sound. The BTC, which houses the Bremerton ferry terminal, is an intermodal transportation facility that generates and disperses significant vehicular traffic volumes destined for the Puget Sound Naval Shipyard or other areas on the west side of Puget Sound. This terminus is also located in Bremerton's Central Business District where several new economic development facilities are being constructed within walking distance of the BTC, including a conference center, condominiums, marinas and other support facilities.

What alternatives are evaluated in this Environmental Assessment?

Alternatives evaluated for the Downtown Bremerton Pedestrian/BTC Access Improvements Project include: (See also **Chapter 2**)

No Build Alternative

This alternative would retain the existing street system and BTC operations. Traffic improvements would be limited to minor traffic system operational

improvements on Burwell Street, Pacific Avenue, 1st Street, and Washington Avenue. BTC improvements would be implemented independently by Kitsap Transit. (See **Exhibit 1-2**)

Surface Alternative 2b

This alternative would widen, reconfigure and reconstruct the surface streets in downtown Bremerton, providing for both ingress and egress of BTC traffic along 1st Street, Pacific Avenue (between 1st Street and Burwell Street), and Burwell Street (between Warren Avenue and Pacific Avenue). A pedestrian overpass at Pacific Avenue and 1st Street is also being considered. (See **Exhibit 1-3**)

Preferred Alternative - Tunnel Alternative 3b

This alternative would provide a two-lane, one-direction tunnel for ferry traffic egress, and would reconfigure and reconstruct the surface alignments of Burwell Street (between Warren Avenue and Pacific Avenue), Pacific Avenue (between 1st Street and Burwell Street), and 1st Street to accommodate ferry traffic ingress. (See **Exhibits 1-4a** and **1-4b**) Basis of evaluation for selecting Tunnel Alternative 3b as the Preferred Alternative is discussed in **Chapter 2** and **Appendix G**.

What elements would be included in both Surface Alternative 2b and Preferred Alternative - Tunnel Alternative 3b?

Both the surface and the tunnel alternatives include realignment of the 1st Street and Pacific Avenue PSNS gate approach to accommodate proposed improvements to the BTC. The following improvements, which were analyzed in a 1997 Environmental Assessment titled *Bremerton Transportation Center* and approved by FTA with the issuance of a FONSI in 2001, would be included:

- Providing holding space for approximately 200 cars;
- Revision of traffic operations in the holding area;
- Adding three realigned Washington State Ferries (WSF) tollbooths, each with adjacent 80 foot long truck measuring areas;
- Building a new 1,000 to 1,200 square foot WSF administration building;
- Construction of improved access between the BTC and SR 304 to the west.

Construction of both alternatives must allow for movement of traffic to and from the BTC without delaying the transit and/or ferry arrival/departure schedules.

Preferred Alternative

The preferred alternative selection was made based on comparison of all initial alternatives. A screening analysis compared the alternatives based on functionality, operations, environmental, social, and economic criteria, along with input from citizens and the project Stakeholders Committee. Based on this analysis, Tunnel Alternative 3b was selected as the preferred alternative. See the Alternatives Analysis Matrices in **Appendix G** for more information.

How have local agencies and the public been involved in the project?

Throughout the development of the project, coordination with the project Executive Oversight Committee (which includes members from the City Council, PSNS, WSDOT, Kitsap Transit, and the City of Bremerton, among others) and the project Stakeholders (which includes members from the City, PSNS, Kitsap Transit, Washington State Ferries, Department of Ecology, the Suquamish Tribe, the Bremerton Chamber of Commerce, and the Kitsap County Consolidated

Housing Authority, among others) has taken place to review alternatives and help guide design decisions. Project information has also been presented to groups such as City Council districts, Rotary and Lyons service clubs, Main Street Association, and the Bremerton Chamber of Commerce to aid in public awareness. For more information, see **Appendix D.**

In early 2003, information regarding the project became available to the public. Since this time, the following public information events have taken place:

- February 2003 – On multiple occasions, the Bremerton Kitsap Access Television (BKAT) published project information by airing the Mayor's Weekly Roundtable discussions.
- February 19, 2003 and July 22, 2003 - The regularly scheduled City Council meeting discussed the project, approved Professional Services Agreements to bring consultants on board for project design, and solicited and received public comments.
- June 2003 - Project development was discussed at the Mayor's Town Meeting.
- August 2003 and October 2003 - Comments regarding the original tunnel proposal were presented and recorded at City Council district meetings for districts 1, 2, 5, 6, 7, 8, and 9. These meetings preceded development of surface alternatives for the project.
- August 20, 2003 and September 1, 2004 - Both the 2004 and 2005 Bremerton Transportation Improvement Plans (TIP) included the Downtown Bremerton Pedestrian/BTC Access Improvements Project. Public hearings for adoption of these plans were held in the fall of 2003 and fall of 2004.
- November 2003 - During preliminary design of the project, two Open House meetings were held in November 2003 to give the public an opportunity to learn about the project alternatives and to provide information that would aid in the selection of one or more alternatives for further study. The opportunity to participate in the public process was publicized via news release, the City's website, and through purchased display ads in the Sun, the Bremerton Patriot, the Port Orchard Independent and the Central Kitsap Reporter. Kitsap Transit agreed to post notices on their routes that serve the downtown Bremerton and the BTC areas. Information packets regarding the project were made available via the internet, at the two public meetings, and through the City of Bremerton. Members of the public who chose to participate in the public meetings also had the opportunity to talk with City officials and the project consulting team to ask questions, gain clarifications and offer insights. Feedback from the public was provided primarily via a feedback form attached to the information packets. Public members were able to submit their forms at the public meetings, via the mail or in person. The opportunity to record verbal feedback was also made available at the public meeting.
- February 2004 - A local group called *Citizens for a Pedestrian Friendly Bremerton* hosted a public information meeting on the project.

Although previous public outreach materials were not been produced in any language other than English, all future public outreach materials will either be produced in, or will be available in, Spanish for the Hispanic population located near the project area.

Who will decide which alternative is selected to improve BTC access and how can I be involved in this decision?

How can I learn more about the project and provide input?

There are several ways to learn more about the project or provide valuable input.

Public Hearing

April 19, 2005

Environmental Assessment Review/Comment Period

May 3, 2005

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For updated project information, please visit WSDOT's project website at: http://www.wsdot.wa.gov/Projects/SR304bremertontunnel/

After making the Environmental Assessment available for a thirty-day public review period, comments received from the public and agencies will be evaluated. Conclusions from that evaluation will be submitted by the Washington State Department of Transportation (WSDOT) to the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) for consideration. Upon review, FTA and FHWA will either issue a Finding of No Significant Impact (FONSI) or an Environmental Impact Statement (EIS) will be required.

Exhibit 1-2. Plan View, Existing Conditions and No Build Alternative

Exhibit 1-3. Plan View, Surface Alternative 2b

Exhibit 1-4a. Plan View, Preferred Alternative - Tunnel Alternative 3b (Surface Conditions)

Exhibit 1-4b. Plan View, Preferred Alternative – Tunnel Alternative 3b (Tunnel Conditions)

Resource Group (Discipline Reports)	No Build Alternative	Surface Alternative 2b	Preferred Alternative - Tunnel Alternative 3b
Vehicular, Transit, and Bicycle Traffic	No change from existing travel patterns. 100 percent of outbound ferry traffic would continue to use Washington Avenue, along with increasing volumes of local traffic attracted by new developments. By 2030, intersections on Washington Avenue would operate at high congestion levels where vehicles would see longer delays. Transit operations would not change, although increased levels of local traffic from new developments could impact transit exiting the BTC at 1st Street and Washington. No improvements would be made to bicycle routes in downtown Bremerton. Bicycle access would continue to operate consistent with existing conditions.	Inbound ferry traffic patterns would not change. Approximately 65 percent of outbound ferry traffic would be rerouted to Burwell Street via 1st Street and Pacific Avenue. The intersection of Washington Avenue and 6th Street would improve over the No Build Alternative from highly congested to moderate congestion. The intersection of Burwell Street and Pacific Avenue, however, would see increased congestion over the No Build Alternative and Tunnel Alternative 3b to high congestion levels. All other intersections would operate comparably. Two-way traffic on Washington Avenue would increase traffic movement conflicts between 1st Street and Burwell Street. One southbound lane on Pacific Avenue would be a designated transit/HOV lane destined to the ferry terminal, PSNS gate, and bus stop near the intersection of Pacific Avenue and 2nd Street, while a second lane would be dedicated for ferry traffic entering the BTC. Two northbound lanes on Pacific Avenue would serve exiting ferry traffic and local traffic. Transit exiting the BTC would merge with local traffic on Washington Avenue. The proposed traffic signal at Park Avenue and Burwell Street would have a transit signal priority system. No designated bicycle lanes would be provided. Bicycles would share the transit lane on southbound Pacific Avenue to eliminate crossover conflicts as bicycles enter the BTC. Bicycles would share the outside vehicle lane on Washington Avenue.	Inbound ferry traffic patterns would not change. Approximately 65 percent of outbound ferry traffic would be rerouted to Burwell Street via a two-lane tunnel under 1st Street and Pacific Avenue. The intersection of Washington Avenue and 6th Street would improve over the No Build Alternative from highly congested to moderate congestion. Congestion at the intersection of Burwell Street and Pacific Avenue would operate at low congestion levels, which would be better than both the No Build Alternative and Surface Alternative 2b. All other intersections would operate comparably. One southbound lane on Pacific Avenue would have a designated transit/HOV lane destined to the ferry terminal, PSNS gate, and bus stop near the intersection of Pacific Avenue and 2nd Street. A second lane would be dedicated for ferry traffic entering the BTC, while a third lane would serve local thru traffic. Transit exiting the BTC would merge with local traffic on Washington Avenue. The proposed traffic signal at Park Avenue and Burwell Street would include a transit signal priority (TSP) system. Bicycles would share the transit lane on southbound Pacific Avenue to eliminate crossover conflicts as bicycles enter the BTC. A bicycle lane on Washington Avenue, between the BTC and Burwell Street would accommodate bicycle use.
Pedestrians	No change from existing travel patterns. High levels of vehicle-pedestrian conflicts would occur in the future on Washington Avenue as new developments attract increasing volumes of vehicle and pedestrian traffic. These increased volumes would mix with 100 percent of offloading ferry traffic on Washington Avenue, causing compromised safety for pedestrians.	With this alternative, 65 percent of offloading ferry traffic would be re-routed from Washington Avenue to Pacific Avenue, improving pedestrian safety on Washington Avenue but decreasing pedestrian safety on Pacific Avenue where there would be increased pedestrian/vehicle conflicts and decreased pedestrian safety. At-grade pedestrian walkways would be provided at all intersections. A pedestrian overpass at Pacific Avenue and 1st Street is being considered.	With this alternative, 65 percent of offloading ferry traffic would be re-routed from Washington Avenue to an underground tunnel under 1st Street and Pacific Avenue, thereby improving pedestrian safety at surface streets on both routes. Fewer conflicts would enhance safety and access to the urban core for pedestrians, thereby supporting the project Purpose and Need. At-grade pedestrian walkways would be added to enhance safety.

Exhibit 1-5. Summary of Impacts by Alternative

Resource Group (Discipline Reports)	No Build Alternative	Surface Alternative 2b	Preferred Alternative - Tunnel Alternative 3b
Parking	No impacts	Approximately 63 short term parking spaces would be removed. Cumulatively with other current developments, long term parking in the project area would increase by 1,207 spaces.	Approximately 41 short term and 173 long term parking spaces would be removed. Cumulatively with other current developments, long term parking in the project area would increase by 1,034 spaces.
Geology and Soils	No impacts	Excavation of approximately 6,000 cubic yards and fill of approximately 1,000 cubic yards would be required for construction of this alternative. Cut and fill near existing structures and construction of footings would occur.	Excavation of approximately 83,000 cubic yards and fill of approximately 33,000 cubic yards would be required for construction of this alternative. Cut and fill near existing structures and construction of footings would occur.
Water Quality	No impacts	Impervious surface within the project area would decrease by 0.69 acres as landscaped medians and planting strips are constructed. This would reduce pollutant loadings over the No Build Alternative. Stormwater from the project would be handled in accordance with the *WSDOT Highway Runoff Manual.*	During construction, the interception of contaminated groundwater could cause impacts. Construction of landscaped medians and planting strips would decrease the impervious surface within the project area by 0.85 acres. This would reduce pollutant loadings over the other alternatives. Stormwater from the project would be handled in accordance with the *WSDOT Highway Runoff Manual.*
Fish, Wildlife, and Vegetation	No impacts	No direct impacts to fish, wildlife, and vegetation.	No direct impacts to fish, wildlife, and vegetation.
Air Quality	By 2030, levels of Carbon Monoxide would be expected to be 7.8 ppm over 8 hours at its highest receptor. This is 1.2 ppm under the maximum air quality standards. Average levels of Carbon Monoxide throughout the project area would be 3.9 ppm over 8 hours, which would be comparable to Surface Alternative 2b and higher than Tunnel Alternative 3b.	By 2030, levels of Carbon Monoxide would be expected to reach 5.5 ppm over 8 hours at its highest receptor. This is 3.5 ppm under the air quality standards. Average levels of Carbon Monoxide throughout the project area would be 3.9 ppm over 8 hours, which would be comparable to the No Build Alternative and higher than Tunnel Alternative 3b.	By 2030, levels of Carbon Monoxide would be expected to reach 5.1 ppm over 8 hours at its highest receptor. This is 3.9 ppm under the air quality standards. Average levels of Carbon Monoxide throughout the project area would be 3.6 ppm over 8 hours, which would be lower than both the No Build Alternative and Surface Alternative 2b.
Noise	In 2030, four modeled noise receptors within the project area with residential land use would exceed FHWA Traffic Noise Criteria.	Noise levels during construction would increase, causing short term impacts to residential uses in downtown Bremerton. In 2030, two modeled noise receptors in the project area with residential land use would exceed FHWA Traffic Noise Criteria.	Noise levels during construction would increase, causing short term impacts to residential uses in downtown Bremerton. In 2030, two modeled noise receptors in the project area with residential land use would exceed FHWA Traffic Noise Criteria.
Energy	Fuel consumption tied to vehicle idling would continue to increase as new development increases traffic volumes and congestion in downtown Bremerton.	Energy would be consumed during construction. Fuel consumption tied to vehicle idling would be decreased over the long term. Fuel consumption tied to vehicle idling would be decreased over the long term compared to the No Build Alternative as roadway congestion is decreased.	More energy would be associated with construction of this alternative than for Surface Alternative 2b because construction duration is estimated to be longer. Fuel consumption tied to vehicle idling would decrease in the long term over the No Build Alternative and Surface Alternative 2b as roadway congestion is decreased.

Exhibit 1-5. Summary of Impacts by Alternative (continued)

Resource Group (Discipline Reports)	No Build Alternative	Surface Alternative 2b	Preferred Alternative - Tunnel Alternative 3b
Hazardous Materials	No impacts	Excavation depth for construction of this alternative would be minimal, and would not be expected to intercept groundwater. Two properties (one full, one partial) would be acquired, each of which would pose a level of risk that WSDOT would acquire a contaminated property and the liability for clean up associated with it.	Excavation for the tunnel would extend as deep as 35 feet below street level, and would be expected to intercept groundwater. Ten properties (seven full, three partial) would be acquired, each of which would pose a level of risk that WSDOT would acquire a contaminated property and the liability for clean up associated with it.
Visual Quality	No impacts	Increased visual quality over the No Build Alternative due to the removal of utility poles and power lines, and the addition of street lights and street trees. Visual evaluations based on vividness, intactness and unity at four viewpoints scored this alternative slightly higher than the existing conditions, but lower than the Preferred Alternative – Tunnel Alternative 3b.	Increased visual quality over the No Build Alternative due to the removal of utility poles and power lines, and the addition of street lights and street trees. Visual evaluations based on vividness, intactness and unity at four viewpoints scored this alternative higher than both the existing conditions and Surface Alternative 2b.
Public Services & Utilities	No impacts	Roadway delays during construction could impact travel time for travelers and emergency providers. Impacts associated with these delays would be less for this alternative than for the Preferred Alternative – Tunnel Alternative 3b due to a shorter estimated construction duration. In the long term, more efficient vehicular access to and from the BTC. Safe access for pedestrians and bicyclists to public spaces in downtown, however, would be less for this alternative than for the Preferred Alternative – Tunnel Alternative 3b due to wider streets and increased traffic on roadways to create conflicts with pedestrians and bicyclists. Some utilities would require relocation.	Construction roadway delays could impact travel time for travelers and emergency providers. Impacts associated with these delays would be greater for this alternative than for Surface Alternative 2b due to detour routes and a longer estimated construction duration. In the long term, this alternative would result in more efficient vehicular access to and from the BTC. Safe access for pedestrians and bicyclists to public spaces would also be provided as roadways are narrowed from those in Surface Alternative 2b and 65 percent of exiting ferry traffic is routed to an underground tunnel, eliminating conflicts. Underground utilities would require relocation as a result of tunnel construction.
Land Use	No impacts	Approximately 6,000 square feet of property would be acquired. Close to half of this area would be converted from commercial uses to transportation right of way, leaving the other half for redevelopment.	Approximately 46,000 square feet of property would be acquired. Close to 19,000 square feet would be converted from commercial uses to transportation right of way, leaving approximately 27,000 square feet for redevelopment.
Parks & Recreational Space	No impacts	The elements of Wycoff Park, determined by the US Navy to not be a significant resource, would be relocated.	The elements of Wycoff Park, determined by the US Navy to not be a significant resource, would be relocated.

Exhibit 1-5. Summary of Impacts by Alternative (continued)

Resource Group (Discipline Reports)	No Build Alternative	Surface Alternative 2b	Preferred Alternative - Tunnel Alternative 3b
Historic & Archaeological Resources	No impacts	The visual setting of one historic building would be altered, creating a non-adverse impact. Although no known cultural resources exist, they could be found during project excavation, particularly at locations near the historic shoreline area. No construction at the existing shoreline is proposed. A Programmatic Agreement with the Office of Archaeology and Historic Preservation and the Suquamish Tribe has been established to set forth procedures for inadvertent discovery of cultural resources during construction.	The visual setting of one historic resource would be altered, creating a non-adverse impact. Although no known cultural resources exist, they could be found during project excavation at locations near the historic shoreline area. No construction at the existing shoreline is proposed. Excavation depths for construction could extend into native soils. A Programmatic Agreement with the Office of Archaeology and Historic Preservation and the Suquamish Tribe has been established to establish procedures for inadvertent discovery of cultural resources during construction.
Environmental Justice and Social	No impacts	Businesses, residents, and commuters in the project area would be impacted by construction for approximately 7 months. Impacts could include short-term noise increases, temporary roadway detours, and visual impacts from construction equipment. Residential communities, which are located at least a couple of blocks to the north and west of the project area, are not expected to be impacted. Construction impacts are anticipated to be realized equally by all users, and are not anticipated to be predominantly borne by any environmental justice populations.	Businesses, residents, and commuters in the project area would be impacted by construction for approximately 12-15 months. Impacts could include temporary noise increases, roadway detours, and visual impacts. Detours would increase traffic on Warren Avenue, 6th Street, and Pacific Avenue. Retaining parking, maintaining access to alleys, and ensuring pedestrian access during construction will be important to minimizing business impacts. Residential communities, which are located at least a couple of blocks to the north and west of the project area, are not expected to be impacted. Impacts are anticipated to be realized equally by all users, and are not anticipated to be predominantly borne by any environmental justice populations.
Disruptions, Relocations & Displacements	No impacts	Two properties would be impacted: one total acquisition and one partial acquisition. Three businesses would require relocation.	Ten properties would be impacted: seven total acquisitions and three partial acquisitions. Up to 11 businesses would require relocation.
Economic	No impacts	During construction, disruption to businesses could cause decreases in retail related traffic and sales. However, construction could benefit the economy by hiring workers and buying construction materials locally. Both impacts would be less for this alternative than for the Preferred Alternative – Tunnel Alternative 3b due to a shorter construction duration. Increased access could benefit the long term economy.	During construction, disruption to businesses could cause decreases in retail related traffic and sales. However, construction could benefit the economy by hiring workers and buying construction materials locally. Both impacts would be larger for this alternative than for the Surface Alternative 2b due to a longer construction duration. Increased access could benefit the long term economy.

Exhibit 1-5. Summary of Impacts by Alternative (continued)